

5.0V HCMOS/TTL COMPATIBLE SMD CRYSTAL CLOCK OSCILLATOR

ASL1 Series



RoHS
Compliant



7.0 x 5.08 x 1.4mm

FEATURES:

- HCMOS and TTL compatible.
- Available optional -40°C to 85°C extended temperature.
- Tri-state Enable/Disable function.
- IR reflow capable
- Seam sealed.

APPLICATIONS:

- Provide clock signals for microprocessors, PC mainboards, Graphic cards.
- High output drive capability applications.
- Personal computer, Laptop computer

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N:	ASL1 Series
Frequency range:	1.000 ~ 125.000 MHz
Operating temperature:	-10° C to + 70° C (See Options)
Storage temperature:	- 55° C to + 125° C
Overall frequency stability:	± 100 ppm max. (see options)
Supply voltage (Vdd):	5.0 V ± 10%
Input current:	See Table 1
Symmetry at 1/2Vdd:	40/60 % max. (see options)
Rise and fall time (Tr/Tf):	See Table 1
Output load:	10TTL or 50 pF (1MHz to 70MHz) 10TTL or 15 pF (70.001MHz to 125MHz)
Output voltage:	VOH = 0.9 * Vdd min. VOL = 0.4 * Vdc max.
Start-up time:	10 ms max.
Tri-state function:	"1" (VIH ≥ 2.2 V) or open: Oscillation "0" (VIL < 0.8 V) : Hi Z
Aging at 25°C/year:	±5ppm max.
Period jitter one sigma:	± 25ps max
Period jitter absolute:	± 100ps max.

Table 1

Freq. (MHz)	Idd max. (mA)	Tr/Tf max. (nSec)
1.0 ~ 34.99	25	10
35.0 ~ 60.0	40	5
60.01~100.0	60	5
100.01 ~ 125	80	2.5

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASL1 - Frequency - □ - □ - □ - □ - □

Operating Temp.	
I	0°C to +50°C
D	-10°C to +60°C
E	-20°C to +70°C
F	-30°C to +70°C
N	-30°C to +85°C
L	-40°C to +85°C

Overall Frequency	
J*	±20ppm
R	±25ppm
K	±30ppm
H	±35ppm
C	±50ppm

*Temp. option I, D, E, and -10°C to +70°C only

Packaging	
Blank	Bulk
T	Tape and Reel

Output Load	
50	50pF

Symmetry	
S	45/55% @ 1/2Vdd
S1	45/55% @ 1/4Vdd





7.0 x 5.08 x 1.4mm

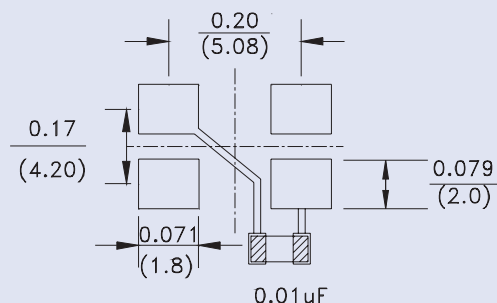
Technical drawing of a rectangular plate with dimensions and tolerances:

- Top View:** A rectangle with a central hole. Dimensions are 140 mm (width, labeled 1) and 208 mm (height, labeled 2). Tolerances are 0.275 ± 0.008 mm (labeled 7.0 + 0.2) and 0.055 ± 0.008 mm (labeled 1.4 + 0.2 / - 0.4).
- Side View:** A cross-section showing the thickness of the plate. The thickness is 0.043 mm (labeled 1.1).
- Bottom View:** A rectangle with four corner holes. Dimensions are 140 mm (width, labeled 1.4) and 208 mm (height, labeled 0.6). Tolerances are 0.055 mm (labeled 1.4) and 0.024 mm (labeled 0.6).

Bottom view

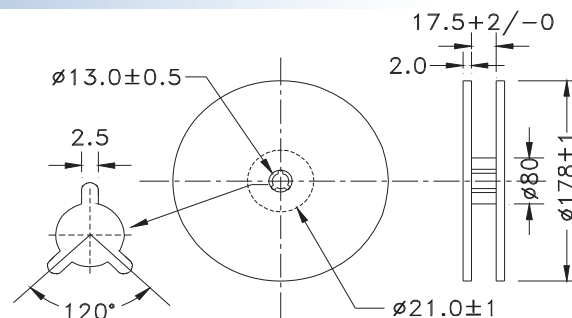
Dimensions: inches (mm)

Recommended land pattern



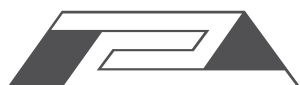
PIN	FUNCTION
1	Tri-state Enable/Disable
2	GND/Case
3	Output
4	Vdd

Note: Recommend using an approximately 0.01uF bypass capacitor between PIN 2 and 4.

[illegible]

Dimensions: mm

NOTE: Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.



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